

Results of Sampling Survey at the Shelter Island Yacht Basin for Dissolved Copper Concentrations

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A Sampling Survey was conducted at the Shelter Island yacht basin to assist in TMDL development by determining concentration levels for dissolved copper. Sample station locations were chosen to characterize levels throughout the basin and to verify the existence of a copper gradient. Station locations are represented by dots on the map in Figure 1. A total of seven stations were sampled for concentrations on two separate occasions in April and June 2000 using a grab technique. Samples were analyzed using a low detection method of analysis. Results from both sampling days were averaged and are presented in Table 1. Figure 2 presents the change in dissolved copper concentration as a function of distance into the yacht basin.

Table 1. Sampling Results for the Shelter Island Yacht Basin.

Station	Average dissolved [Cu] (ppb)	Latitude (North)	Longitude (West)	Distance from G (meters)
A	8	32.71797	117.22569	2007
B	7.7	32.71386	117.22831	1510
C	5	32.71550	117.22989	1549
D	5.9	32.71683	117.23203	1607
E	3.5	32.71217	117.23297	1080
F	2.6	32.70858	117.23514	635
G	1.5	32.70386	117.23131	0

Figure 1. Map of the Shelter Island Yacht Basin Sampling Locations*



*The relative size of the dots correlate with the concentration of dissolved copper at the sample station.

Figure 2. Dissolved Copper Concentration versus Distance into the Yacht Basin.

